IN THE CLAIMS:

Please cancel and amend the claims as follows:

1. (Previously Presented) A method of sending data from a first computer to a second computer connected within a network, the first and second computers configured to send the data using a layered sequence of data communication protocols, the layered sequence of data communication protocols comprising at least a first protocol layer and a second protocol layer, the method comprising:

generating a first layer protocol data unit (PDU) by:

(a) attaching a first header to the data at the first protocol layer of the first computer; and

(b) reserving a space in the first header for an identifier;

sending the first layer PDU from the first protocol layer to the second protocol layer of the first computer;

generating a second layer PDU by:

(a) attaching a second header to the first layer PDU at the second protocol layer of the first computer;

(b) reserving a space in the second header for the identifier;

(c) generating the identifier at the second protocol layer; and

(d) storing the identifier in the reserved space of the second header and sending a copy of the identifier to the first protocol layer;

sending the second layer PDU from the second protocol layer of the first computer to its corresponding second protocol layer of the second computer over the network;

removing the second header from the second layer PDU at the second protocol layer of the second computer;

copying the identifier from the reserved space in the second header to the reserved space in the first header;

sending the first layer PDU from the second protocol layer of the second computer to the first protocol layer of the second computer; and

removing the first header from the first layer PDU at the first protocol layer of the second computer.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the first protocol layer is the highest protocol layer of the layered sequence of data communication protocols.

4. (Previously Presented) The method of claim 1, wherein the second protocol layer is the lowest protocol layer of the layered sequence of data communication protocols.

5. (Cancelled)

6. (Original) The method of claim 1, wherein the identifier is generated using a counter.

7. (Original) The method of claim 1, further comprising sending a code from the second protocol layer of the first computer to the first protocol layer of the first computer, the code indicating whether the data was successfully sent from the second protocol layer of the first computer to its corresponding second protocol layer of the second computer.

8. (Original) The method of claim 1, wherein the space reserved for the identifier is the first four bytes of each header.

9. (Previously Presented) A method of sending data from a computer to a network through a layered sequence of data communication protocol layers, the protocol layers comprising at least a first protocol layer and a second protocol layer, the method comprising:

generating a first layer protocol data unit (PDU) by:

(a) attaching a first header to the data at the first protocol layer; and

(b) reserving a space in the first header for an identifier;

sending the first layer PDU from the first protocol layer to the second protocol layer;

generating a second layer PDU by:

(a) attaching a second header to the first layer PDU at the second protocol layer of the first computer;

(b) reserving a space in the second header for the identifier;

(c) generating the identifier at the second protocol layer; and

(d) storing the identifier in the reserved space of the second header and sending a copy of the identifier to the first protocol layer;

sending the second layer PDU from the second protocol layer to the network.

10. – 25. (Cancelled)

26. (Previously Presented) A method of processing data for transmission to a remote computer using a data communications protocol stack that includes a plurality of protocol layers, the method comprising:

beginning with a first protocol layer and for each successively lower layer of the protocol stack:

(a) attaching a header associated with a current layer of the protocol stack to the data;

(b) reserving a space in the header for an identifier; and

(c) sending the data and attached header to the next successive layer in the protocol stack;

additionally, at a lowest successive layer of the protocol stack:

(a) generating the identifier; and

(b) storing the identifier in the reserved space of the lowest successive layer of the protocol stack; and

(c) returning a copy of the identifier to a previous layer of the protocol stack.

27. (Previously Presented) The method of claim 1, wherein, the identifier is returned to each of the plurality of protocol layers by returning a copy the identifier, successively, from the last protocol layer to each successive protocol layer.

28. (Previously Presented) The method of claim 26, wherein the data communications protocol stack comprises the TCP/IP protocol stack, and a wherein the plurality of protocol layers include an application, transport, internet, and network layer.

29. (Previously Presented) The method of claim 26, further comprising,

receiving, by a lowest protocol layer of the protocol stack at the remote computer, the data and headers;

retrieving the identifier from the header associated with the lowest protocol layer;

removing the header associated with the lowest protocol layer from the data;

transmitting the data and the identifier to the next successively higher layer of the protocol stack.

beginning with the next successively higher layer protocol layer and for each successively higher layer of the protocol stack:

(a) removing a header from the data associated with a current protocol layer;

(b) transmitting the data and the identifier to the next successively higher layer of the protocol stack.